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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,146

Applicant(s)

TURBA, THOMAS N.

Examiner

Kuen S. Lu

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Action is responsive to the Applicant's Amendments, filed on June 10, 2005.

Please note new issues were raised when new elements and amended elements were introduced to each of the independent claims 1, 6, 11, 16 and 21 in the Amendments.

2. Concerning the Applicant's Remarks on claim rejections, filed on August 22, has been fully considered by the Examiner. Please see discussion in the section **Response to Arguments**, following the Action, as shown next.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 16 and 21-22 are rejected under 35 U.S.C. 102(e) as anticipated by Fernandez et al. (U.S. Patent 6,604,100 B1, hereafter "Fernandez").

As per claim 16, Fernandez teaches the following:

"a. creating means for creating an XML document defining a service request utilizing a customized user interface" (See Fig. 1 and col. 5, lines 11-15 and 26-29 wherein Fernandez' XML virtual view is formulated at the application and transferred to SilkRoute for decomposing into XML templates and SQL queries for defining a service

request is equivalent to the Applicant's creating means for creating an XML document defining a service request utilizing a customized user interface);

"b. transmitting means responsively coupled to said creating means for transmitting said XML document defining said service request" (See Fig. 1 and col. 5, lines 11-21 wherein Fernandez' application formulates the XML-QL query and transmits to query composer in the SilkRoute via web/intranet is equivalent to the Applicant's transmitting means responsively coupled to said creating means for transmitting said XML document defining said service request);

"c. providing means responsively coupled to said transmitting means for providing data base management functions to honor said service request and for providing a portion of said customized user interface to said creating means" (See Fig. 1, col. 4, line 64 to col. 5, line 2 and col. 9, lines 61-69 wherein Fernandez' SilkRoute is the customized interface for receiving XML-QL query, decomposing the query into SQL queries and XML templates, retrieving tuple streams, and combining XML templates with tuple streams to return to the application is equivalent to the Applicant's providing means responsively coupled to said transmitting means for providing data base management functions to honor said service request and for providing a portion of said customized user interface to said creating means); and

"d. composing means responsively coupled to said providing means for composing said XML document from an XML mapping tree and data said data base management system" (See Fig. 1 and col. 5, lines 37-45 wherein Fernandez' interface composes XML templates and tuple streams of data retrieved from database for returning to the

application is equivalent to the Applicant's composing means responsively coupled to said providing means for composing said XML document from an XML mapping tree and data said data base management system).

As per claim 21, Fernandez teaches the following:

"a. a user terminal having a customized user interface with which said user terminal generates a database management system service request as said XML message" (See Fig. 1, col. 5, lines 11-25 and col. 9, lines 61-62 wherein Fernandez' application formulates user query XML-QL and interfaces SilkRoute to decompose user query into XML templates and SQL queries for querying database is equivalent to the Applicant's a user terminal having a customized user interface with which said user terminal generates a database management system service request as said XML message);

"b. said legacy database management system responsively coupled to said user terminal via a publicly accessible digital data communication network which stores components of said customized user interface and which transfers said components of said customized user interface to said user terminal for generating said service request as said XML message and which honors said service request by executing an ordered sequence of command language script" (See Fig. 1, col. 2, lines 35-42 and 47-51, col. 5, lines 11-25 and col. 9, lines 61-62 wherein Fernandez' a RXL query and XML-QL is provided to the SilkRoute for mapping relational sources to XML views and querying over the relational view in the database via the distributed network, and the merged XML templates and tuple streams is returned to the application is equivalent to the

Applicant's said legacy database management system responsively coupled to said user terminal via a publicly accessible digital data communication network which stores components of said customized user interface and which transfers said components of said customized user interface to said user terminal for generating said service request as said XML message and which honors said service request by executing an ordered sequence of command language script); and

"a conversion facility responsively coupled to said legacy database management system which parses said XML message to produce said ordered sequence of command language script" (See Fig. 1, col. 5, lines 11-25 and col. 9, lines 61-62 wherein Fernandez' application formulates user query XML-QL and interfaces SilkRoute to decompose user query into XML templates and SQL queries for querying database a conversion facility responsively coupled to said legacy database management system which parses said XML message to produce said ordered sequence of command language script).

As per claim 22, Fernandez further teaches "wherein at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree" (See col. 10, lines 15-27 where the attributes \$pid and \$item are mapped between the XML templates and database table such that the resulting tuple streams is merged with XML templates to output XML document is equivalent the Applicant's at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et al. (U.S. Patent 6,604,100 B1, hereafter "Fernandez") in view of Warshavsky et al. (U.S. Patent 6,732,095, hereafter "Warshavsky").

As per claim 1, Fernandez teaches "In a data processing system having a user terminal which generates a service request to define desired data processing services coupled to a data base management system which provides said desired data processing services by execution of an ordered sequence of native command language script via a publicly accessible digital data communication network" (See Fig. 1 and col. 2, lines 29-64 where SilkRoute automates the conversion of relational data into XML via mapping in which XML-QL query is executed to view data in an application, interface, network and database server environment is equivalent to the Applicant's admitted prior art subject matter) and the following improvement:

"a. a customized user interface having a plurality of components wherein at least one of said plurality of components is stored within said user terminal and at least another one of said plurality of components is stored within and transferred via said publicly

accessible digital data communication network from said data base management system" (See Fig. 1 and col. 5, lines 26-29 and 42-45 wherein Fernandez' SilkRoute is the interface having XML templates stored within and tuple streams transmitted from a database server to produce an XML document is equivalent to the Applicant's a customized user interface having a plurality of components wherein at least one of said plurality of components is stored within said user terminal and at least another one of said plurality of components is stored within and transferred via said publicly accessible digital data communication network from said data base management system); and "b. a document containing a plurality of elements formatted in XML (extensible markup language) generated by said user terminal utilizing said customized user interface" (See Fig. 1 and col. 5, lines 42-45 wherein Fernandez' XML document is produced at the SilkRoute by using XML templates in the interface and tuple streams transmitted from a database server is equivalent to the Applicant's a document containing a plurality of elements formatted in XML generated by said user terminal utilizing said customized user interface).

Fernandez does not explicitly teach the generated XML document be "transferred from said user terminal to said data base management system which contains said service request".

However, Warshavsky teaches XML document be "transferred from said user terminal to said data base management system which contains said service request" (See col. 4, lines 65-67 and col. 5, lines 1-3 wherein Warshavsky's XML converter allows users to convert bi-directionally between database and XM document is

equivalent to the Applicant's XML document be transferred from said user terminal to said data base management system which contains said service request).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Warshavsky with Fernandez reference because both references are devoted to XML documents and relational database data conversions and the combined reference would have enabled a complete web-based system to invoke a seamless bi-directional flow of XML documents between application and database. Further, the system would have been enhanced with composite query composition capability to efficiently transform data between relational and XML representations.

The combined teaching of the Fernandez and Warshavsky references further teaches "c. an XML mapping tree stored within said data base management system via which the transformation of each of said plurality of elements is defined which permits conversion of said document to said ordered sequence of native command language script" (See Warshavsky: at Fig. 1, col. 4, lines 52-57 and col. 5, lines 4-5 and 46-54 where the metadata of XML mapping definition is stored in allocation, such as repository, and the definition is of hierarchical structure whose entities represented by one to many relationships between objects, components and fields for converting XML document into columns of a record in a relational table is equivalent to the Applicant's an XML mapping tree stored within said data base management system via which the transformation of each of said plurality of elements is defined which permits conversion of said document to said ordered sequence of native command language script).

As per claim 6, Fernandez teaches the following:

- "a. a user terminal having a customized user interface wherein a portion of said customized user interface is not resident within said user terminal" (See Fig. 1 and col. 4, line 64 to col. 5, line 2 wherein Fernandez' SilkRoute is the customized interface in which SilkRoute is outside of the user terminal is equivalent to the Applicant's a user terminal having a customized user interface wherein a portion of said customized user interface is not resident within said user terminal);
- "b. an XML document which describes a service request defining a database management process generated by said user terminal utilizing said customized user interface" (See Fig. 1 and col. 5, lines 11-15 and 26-29 wherein Fernandez' XML virtual view is formulated at the application and transferred to SilkRoute for decomposing into XML templates and SQL queries for defining a service request is equivalent to the Applicant's an XML document which describes a service request defining a database management process generated by said user terminal utilizing said customized user interface);
- "c. a publicly accessible digital data communication network" (See Fig. 1 and col. 4, line 64 to col. 5, line 2 wherein Fernandez' accessing data via a distributed network is equivalent to the Applicant's a publicly accessible digital data communication network);
- "d. a data base management system having an input format different from XML which involves a native script which is executed by said data base management system to honor said service request responsively coupled to said publicly accessible digital data

communication network which transfers said portion of said customized user interface not resident within said user terminal to said user terminal and which receives said XML document via said publicly accessible digital data communication network" (See col. 2, lines 35-42 and 47-51 wherein Fernandez' a RXL query and XML-QL is provided to the SilkRoute, an interface outside of the users system, for mapping relational sources to XML views and querying over the relational view in the database via the distributed network is equivalent to the Applicant's a data base management system having an input format different from XML which involves a native script which is executed by said data base management system to honor said service request responsively coupled to said publicly accessible digital data communication network which transfers said portion of said customized user interface not resident within said user terminal to said user terminal and which receives said XML document via said publicly accessible digital data communication network).

Fernandez does not explicitly teach "e. an XML mapping tree responsively coupled to said data base management system which parses said XML document into said input format of said data base management system which involves said native script which is executed by said data base management system to honor said service request".

However, Warshavsky teaches "an XML mapping tree responsively coupled to said data base management system which parses said XML document into said input format of said data base management system which involves said native script which is executed by said data base management system to honor said service request" (See Fig. 1, col. 4, lines 52-57 and col. 5, lines 4-5 and 46-54 where the metadata of XML

mapping definition is stored in allocation, such as repository, and the definition is of hierarchical structure whose entities represented by one to many relationships between objects, components and fields for converting XML document into columns of a record in a relational table is equivalent to the Applicant's an XML mapping tree responsively coupled to said data base management system which parses said XML document into said input format of said data base management system which involves said native script which is executed by said data base management system to honor said service request).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Warshavsky with Fernandez reference because both references are devoted to XML documents and relational database data conversions and the combined reference would have enabled a complete web-based system to invoke a seamless bi-directional flow of XML documents between application and database. Further, the system would have been enhanced with composite query composition capability to efficiently transform data between relational and XML representations.

As per claim 11, Fernandez teaches the following:

"A method of using an XML document to define a service request to a data base management system having an incompatible input protocol including an ordered sequence of command language statements for execution by said data base management system to honor said service request" (See Fig. 1 and col. 9, lines 61-65

where SilkRoute decomposes and translates user's XML-QL query into series of SQL queries to be executed against database and XML template is equivalent to the Applicant's method of using an XML document to define a service request to a data base management system having an incompatible input protocol including an ordered sequence of command language statements for execution by said data base management system to honor said service request);

"a. transferring a portion of a customized user interface to a user terminal" (See Fig. 1 and col. 5, lines 26-29 and 42-45 wherein Fernandez' SilkRoute combining the XML template interface with tuple streams retrieved from database for transferring to the user terminal is equivalent to the Applicant's transferring a portion of a customized user interface to a user terminal);

"b. creating said XML document by said user terminal using said customized user interface" (See Fig. 1, col. 5, lines 15-16, 29-36, 41-45 and 52-55 wherein Fernandez' user application uses virtual XML view to formulate user query XML-QL and transmit to the interface SilkRoute, the interface merges XML templates and record tuples to return to application is equivalent to the Applicant's creating said XML document by said user terminal using said customized user interface).

Fernandez does not explicitly teach "c. transferring said XML document defining said service request to said data base management system via a publicly accessible digital data communication network".

However Warshavsky teaches "c. transferring said XML document defining said service request to said data base management system via a publicly accessible digital

data communication network" (See Fig. 1, col. 4, lines 52-57 and col. 5, lines 4-5 and 46-54 where the metadata of XML mapping definition is stored in allocation, such as repository, and the definition is of hierarchical structure whose entities represented by one to many relationships between objects, components and fields for converting XML document into columns of a record in a relational table is equivalent to the Applicant's transferring said XML document defining said service request to said data base management system via a publicly accessible digital data communication network).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Warshavsky with Fernandez reference because both references are devoted to XML documents and relational database data conversions and the combined reference would have enabled a complete web-based system to invoke a seamless bi-directional flow of XML documents between application and database. Further, the system would have been enhanced with composite query composition capability to efficiently transform data between relational and XML representations.

The combined teaching of the Fernandez and Warshavsky references further teaches "d. parsing said XML document into an XML mapping tree" (See Fernandez: col. 5, lines 29-36 and col. 9, lines 61-62 wherein Fernandez' interface syntax checking of RXL query and decomposing it into SQL queries and XML templates is equivalent to the Applicant's parsing said XML document into an XML mapping tree); and "e. presenting said parsed XML document as said ordered sequence of command language statements to said data base management system for processing by

execution" (See Fernandez: col. 9, lines 61-62 wherein Fernandez' interface presents the SQL queries for being executed by the database server is equivalent to the Applicant's presenting said parsed XML document as said ordered sequence of command language statements to said data base management system for processing by execution).

As per claims 2, 8 and 14, the combined teaching of Fernandez and Warshavsky further teaches "wherein at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree" (See Fernandez: col. 10, lines 15-27 where the attributes \$pid and \$item are mapped between the XML templates and database table such that the resulting tuple streams is merged with XML templates to output XML document is equivalent the Applicant's at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree).

As per claims 3 and 13, the combined teaching of Fernandez and Warshavsky further teaches "document is defined by a Document according to claim 2 wherein said Type Definition (DTD)" (See Fernandez: col. 4, lines 42-48 where effort was made to conform XML view with DTD is equivalent to the Applicant's document is defined by a Document according to claim 2 wherein said Type Definition (DTD)).

As per claims 4, 7 and 12, the combined teaching of Fernandez and Warshavsky further teaches "comprising a storage space within said data base management system in which said XML mapping tree is stored for future use" (See Fernandez: col. 5, lines 52-56 where query composition is kept virtual for later composition with other user queries, and Warshavsky: at Fig. 1, col. 4, lines 52-57 and col. 5, lines 4-5 and 46-54 where the metadata of XML mapping definition is stored in allocation, such as repository).

As per claim 5, the combined teaching of Fernandez and Warshavsky further teaches "said XML mapping tree is transferred to said user terminal" (See Fernandez: col. 5, lines 42-45 where XML templates is merged with tuple stream for returning to the application, and Warshavsky: col. 4, lines 50-57 where a metadata schema is proposed to create XML mapping definition).

The combined teaching does not explicitly teach the mapping be "displayed on said user terminal in a window"

However, visual tool is popular for displaying and editing relational data schema, for example, Oracle®'s ERWIN Entity-Relational modeling tool.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to further combine the teaching of Warshavsky and Fernandez references with feature for displaying mapping tree because it would have enabled users of Warshavsky and Fernandez' systems to better comprehend and modify the mapping and conversion between relational XML data structure.

As per claims 9 and 15, the combined teaching of Fernandez and Warshavsky further teaches "wherein said publicly accessible digital data communication system further comprises the Internet" (See Fernandez: col. 1, lines 11-12 where the relational data to structure data conversion is implemented on internet).

As per claim 10, the combined teaching of Fernandez and Warshavsky further teaches "wherein said XML mapping tree is hierarchical" (See Fernandez: col. 7, line 8-10 where RXL query is a tree structure and well-formed XML, Warshavsky: col. 4, lines 52-57 where metadata XML mapping definition maps XML document and relational data).

7. Claims 17-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et al. (U.S. Patent 6,604,100 B1, hereafter "Fernandez"), as applied to claims 16 and 21 above and further in view of Warshavsky et al. (U.S. Patent 6,732,095, hereafter "Warshavsky").

As per claims 17 and 24, Fernandez teaches query composition is kept virtual for later composition with other user queries at col. 5, lines 52-56.

Fernandez does not explicitly teach "comprising a storage space within said data base management system in which said XML mapping tree is stored for future use".

However, Warshavsky further teaches "comprising a storage space within said data base management system in which said XML mapping tree is stored for future use"

(See Fig. 1, col. 4, lines 52-57 and col. 5, lines 4-5 and 46-54 where the metadata of XML mapping definition is stored in allocation, such as repository).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Warshavsky with Fernandez reference because both references are devoted to XML documents and relational database data conversions and the combined reference would have enabled a complete web-based system to invoke a seamless bi-directional flow of XML documents between application and database. Further, the system would have been enhanced with composite query composition capability to efficiently transform data between relational and XML representations.

As per claim 18, the combined teaching of Fernandez and Warshavsky references further teaches "wherein at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree" (See Fernandez: col. 10, lines 15-27 where the attributes \$pid and \$item are mapped between the XML templates and database table such that the resulting tuple streams is merged with XML templates to output XML document is equivalent the Applicant's at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree).

As per claim 20, the combined teaching of Fernandez and Warshavsky further teaches means for transferring XML mapping tree is transferred to user terminal (See

Fernandez: col. 5, lines 42-45 where XML templates is merged with tuple stream for returning to the application, and Warshavsky: col. 4, lines 50-57 where a metadata schema is proposed to create XML mapping definition).

The combined teaching does not explicitly teach the “displaying said XML document”.

However, visual tool is popular for displaying and editing relational data schema, for example, Oracle®’s ERWIN Entity-Relational modeling tool where parent-child relationship is of hierarchical structure.

It would have been obvious to one having ordinary skill in the art at the time of the applicant’s invention was made to further combine the teaching of Warshavsky and Fernandez references with feature for displaying mapping tree and XML document because it would have enabled users of Warshavsky and Fernandez’ systems to better comprehend and modify the mapping and conversion between relational XML data structure.

As per claims 19 and 25, the combined teaching of Fernandez and Warshavsky further teaches “wherein said publicly accessible digital data communication system further comprises the Internet” (See Fernandez: col. 1, lines 11-12 where the relational data to structure data conversion is implemented on internet).

As per claim 23, the combined teaching of Fernandez and Warshavsky further teaches “said conversion facility further comprises an element to source mapping tree”

(See Warshavsky: col. 4, lines 52-57 where each definition in the XML Mapping Definitions is an element to the mapping tree).

8. The prior art made of record

F. U.S. Patent 6,604,100

G. U.S. Patent 6,732,095

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. U.S. Publication 2002/0123993

B. U.S. Publication 2002/0156811

C. U.S. Publication 2002/0078768

D. U.S. Publication 2003/0191769

E. U.S. Patent 6,480,860

Response to Arguments

9. Applicant's arguments, filed on June 10, 2005, with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusions

10. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

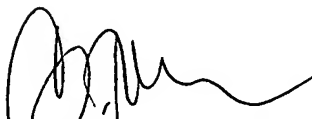
11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:30 am - 5:30 pm). If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jean R. Homere, Esq. can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 Published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu 

Patent Examiner

December 3, 2005


K. S. LU
Patent Examiner